

[illegible][illegible]

TRA
V04

•

TTTTTTTTTT	IIIIII	MM	MM	RRRRRRRR	BBBBBBBB	
TTTTTTTTTT	IIIIII	MM	MM	RRRRRRRR	BBBBBBBB	
TT	II	MMMM	MMMM	RR	RR	BB
TT	II	MMMM	MMMM	RR	RR	BB
TT	II	MM	MM	RR	RR	BB
TT	II	MM	MM	RR	RR	BB
TT	II	MM	MM	RRRRRRRR		BBBBBBBB
TT	II	MM	MM	RRRRRRRR		BBBBBBBB
TT	II	MM	MM	RR	RR	BB
TT	II	MM	MM	RR	RR	BB
TT	II	MM	MM	RR	RR	BB
TT	II	MM	MM	RR	RR	BB
TT	IIIIII	MM	MM	RR	RR	BBBBBBBB
TT	IIIIII	MM	MM	RR	RR	BBBBBBBB

```

LL          IIIIII          SSSSSSSS
LL          IIIIII          SSSSSSSS
LL          II             SS
LL          II             SS
LL          II             SS
LL          II             SS
LL          II             SSSSSS
LL          II             SSSSSS
LL          II             SS
LL          II             SS
LL          II             SS
LL          II             SS
LL          II             SSSSSS
LLLLLLLLLLLL IIIIIIII          SSSSSSSS
LLLLLLLLLLLL IIIIIIII          SSSSSSSS

```

6 7
16-Sep-1984 00:15:42
5-Sep-1984 14:23:34

VAX-11 FORTRAN V3.4-56
DISK\$VMSMASTER:[ERF.SRC]TIMRB.FOR;1

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```
0001      SUBROUTINE TIMRB (LUN)! NOTE BEGINNING OF TIMED INTERVAL
0002      C
0003      C Version:      'V04-000'
0004      C
0005      C*****
0006      C*
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0024      C*
0025      C*
0026      C*****
0027      C
0028      C++
0029      C FACILITY:      ERF, Errorlog Report Formatter
0030      C
0031      C ABSTRACT:
0032      C
0033      C      Runtime statistics timing package.
0034      C
0035      C ENVIRONMENT:
0036      C
0037      C      VAX/VMS operating system, unprivileged, user mode.
0038      C
0039      C MODIFIED BY:
0040      C
0041      C      V03-002 SAR0212      Sharon A. Reynolds      22-Mar-1984
0042      C      Changed the carriage control in a format statement for
0043      C      use with output file.
0044      C
0045      C      V03-001 JMG0010      Joel M. Gringorten      02-Feb-1984
0046      C      Rewrote the error handling from GETJPI system service to
0047      C      utilize LIB$SIGNAL, and the ERFMSG file.
0048      C
0049      C
0050      C      SAVE CURRENT PROCESS STATISTICS IN VARIABLES IN COMMON
0051      C      USAGE:
0052      C      CALL TIMRB      !START OF TIMED INTERVAL
0053      C
0054      C EQUATED SYMBOLS:
0055      C
0056      C
0057      C      COMMON /STAT_VARS/ TO,BUF10,CPUTIME,DIRIO,PFLTS
```



```

0058      INTEGER*4 BUFIO,CPUTIME,DIRIO,PFLTS
0059
0060      COMMON /JOB_PARAM/ LEN4A,BUFIO_CODE,BUFIO_ADR,ZERO,
0061      2          LEN4B,CPUTIME_CODE,CPUTIME_ADR,ZERO1,
0062      2          LEN4C,DIRIO_CODE,DIRIO_ADR,ZERO2,
0063      2          LEN4D,PFLTS_CODE,PFLTS_ADR,ZERO3,
0064      2          ZERO4
0065      BYTE      LUN
0066      INTEGER*2 LEN4A,LEN4B,LEN4C,LEN4D
0067      INTEGER*2 BUFIO_CODE,CPUTIME_CODE,DIRIO_CODE,PFLTS_CODE
0068      INTEGER*4 BUFIO_ADR,CPUTIME_ADR,DIRIO_ADR,PFLTS_ADR
0069      INTEGER*4 NEW_BUFIO,NEW_CPUTIME,NEW_DIRIO,NEW_PFLTS
0070      INTEGER*4 ZERO,ZERO1,ZERO2,ZERO3,ZERO4,SYSSGETJPI,STATUS
0071
0072      LOGICAL*1      ERROR
0073
0074      EXTERNAL      ERF_NOSTATS, ERF_GETJPIERR
0075
0076      C
0077      C
0078      C
0079      C
0080      C
0081      C
0082      C
0083      C
0084      C
0085      C
0086      C
0087      C
0088      C
0089      C
0090      C
0091      C
0092      C
0093      C
0094      C
0095      C
0096      C
0097      C
0098      C
0099      C
0100      C
0101      C
0102      C
0103      C
0104      C
0105      C
0106      C
0107      C
0108      C
0109      C
0110      C
0111      C
0112      C
0113      C
0114      C

```

***** NOTE THE FOLLOWING CODES ARE VMS SYMBOLLIC PARAMS.
 THEY MAY CHANGE IN FUTURE VERSIONS OF VMS...BEWARE!
 DATA BUFIO_CODE /1036/ JPI\$BUFIO
 DATA CPUTIME_CODE /1031/ JPI\$CPUTIM
 DATA DIRIO_CODE /1035/ JPI\$DIRIO
 DATA PFLTS_CODE /1034/ JPI\$PAGEFLTS
 DATA LEN4A,LEN4B,LEN4C,LEN4D /4,4,4,4/

```

=====
TO = SECNDS(0.)
BUFIO_ADR      = %LOC(BUFIO)
CPUTIME_ADR    = %LOC(CPUTIME)
DIRIO_ADR      = %LOC(DIRIO)
PFLTS_ADR      = %LOC(PFLTS)

ERROR = .FALSE.

STATUS = SYSSGETJPI(,,,LEN4A,,,)
IF (.NOT. STATUS) THEN
CALL LIB$SIGNAL(ERF_GETJPIERR,%VAL(0),%VAL(STATUS))

ERROR = .TRUE.
ENDIF

RETURN

ENTRY TIMRE (LUN)! PRINT EXECUTION STATISTICS FOR INTERVAL

USAGE:      CALL TIMRE      !END OF TIMED INTERVAL

TIMRE OBTAINS PROCESS STATISTICS AND SUBTRACTS THE
BEGINNING-OF-INTERVAL STATISTICS RECORDED BY TIMRB.
THE INCREMENTAL VALUES ARE WRITTEN TO UNIT "TTY"
(FORTRAN UNIT 6).
BUFIO_ADR      = %LOC(NEW_BUFIO)
CPUTIME_ADR    = %LOC(NEW_CPUTIME)

```

```
0115      DIRIO_ADR      = %LOC(NEW_DIRIO)
0116      PFLTS_ADR      = %LOC(NEW_PFLTS)
0117
0118      C
0119
0120      STATUS = SYSSGETJPI(...,LEN4A,...)
0121      IF (.NOT. STATUS) THEN
0122      CALL LIB$SIGNAL(ERF_GETJPIERR,%VAL(0),%VAL(STATUS))
0123
0124      ERROR = .TRUE.
0125      ENDIF
0126
0127      C
0128
0129      CLKTIME = SECNDS(TO)
0130
0131      CPUSECS = (NEW_CPUTIME-CPUTIME)/100.
0132      BUFIO = NEW_BUFIO - BUFIO
0133      DIRIO = NEW_DIRIO - DIRIO
0134      PFLTS = NEW_PFLTS - PFLTS
0135
0136      IF (ERROR) THEN
0137      CALL LIB$SIGNAL(ERF_NOSTATS)
0138
0139      ELSE
0140
0141      CALL LINCHK (LUN,7)
0142
0143      WRITE(LUN,110) CPUSECS,CLKTIME,PFLTS,DIRIO,BUFIO
0144      110  FORMAT('PROGRAM RUNTIME STATISTICS',//
0145      1 : 'T8,TIMES IN SECONDS',T29,'PAGE',T39,'DIRECT',T49,'BUFFERED',//
0146      2 : 'T12,CPU ELAPSED',T29,'FAULTS',T39,'I/O',T49,'I/O',//,
0147      3 : 'T6,F9.1,F9.1,T25,I10,T39,I6,T49,I8,/)
0148      ENDIF
0149
0150      C      SAVE STATE FOR NEXT TIME AROUND
0151      C      THE USER IS SUPPOSED TO CALL TIMRB AGAIN, BUT IN CASE HE DOESN'T ...
0152
0153      TO = SECNDS(0.)
0154      CPUTIME = NEW_CPUTIME
0155      BUFIO = NEW_BUFIO
0156      DIRIO = NEW_DIRIO
0157      PFLTS = NEW_PFLTS
0158      RETURN
0159      END
```


PROGRAM SECTIONS

Name	Bytes	Attributes
0 \$CODE	357	PIC CON REL LCL SHR EXE RD NOWRT LONG
1 \$PDATA	175	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2 \$LOCAL	116	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3 STAT_VARS	20	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4 JOB_PARAM	52	PIC OVR REL GBL SHR NOEXE RD WRT LONG
Total Space Allocated	720	

ENTRY POINTS

Address	Type	Name	Address	Type	Name
0-00000000		TIMRB	0-0000005F		TIMRE

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
3-00000004	I*4	BUFIO	4-00000004	I*4	BUFIO_ADR	4-00000002	I*2	BUFIO_CODE	2-00000018	R*4	CLKTIME
2-0000001C	R*4	CPUSECS	3-00000008	I*4	CPUTIME	4-00000010	I*4	CPUTIME_ADR	4-0000000E	I*2	CPUTIME_CODE
3-0000000C	I*4	DIRIO	4-0000001C	I*4	DIRIO_ADR	4-0000001A	I*2	DIRIO_CODE	2-00000000	L*1	ERROR
4-00000000	I*2	LEN4A	4-0000000C	I*2	LEN4B	4-00000018	I*2	LEN4C	4-00000024	I*2	LEN4D
AP-00000004	L*1	LUN	2-00000004	I*4	NEW BUFIO	2-00000008	I*4	NEW CPUTIME	2-0000000C	I*4	NEW DIRIO
2-00000010	I*4	NEW PFLTS	3-00000010	I*4	PFLTS	4-00000028	I*4	PFLTS_ADR	4-00000026	I*2	PFLTS_CODE
2-00000014	I*4	STATUS	3-00000000	R*4	T0	4-00000008	I*4	ZERO	4-00000014	I*4	ZERO1
4-00000020	I*4	ZERO2	4-0000002C	I*4	ZERO3	4-00000030	I*4	ZERO4			

LABELS

Address	Label
1-00000008	110'

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	ERF_GETJPIERR		ERF_NOSTATS	R*4	FOR\$SECNDS		LIB\$SIGNAL		LINCHK
								I*4	SYS\$GETJPI

COMMAND QUALIFIERS

FORTRAN /LIS=LISS:TIMRB/OBJ=OBJ\$:TIMRB MSRC\$:TIMRB

/CHECK=(NOBOUNDS,OVERFLOW,NOUNDERFLOW)

/DEBUG=(NOSYMBOLS,TRACEBACK)

/STANDARD=(NOSYNTAX,NOSOURCE FORM)

/SHOW=(NOPREPROCESSOR,NOINCLUDE,MAP)

/F77 /NOG_FLOATING /I4 /OPTIMIZE /WARNINGS /NOD_LINES /NOCROSS_REFERENCE /NOMACHINE_CODE /CONTINUATIONS=19

TIMRB

K 7
16-Sep-1984 00:15:42
5-Sep-1984 14:23:34

VAX-11 FORTRAN V3.4-56
DISK\$VMSMASTER:[ERF.SRC]TIMRB.FOR;1

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COMPILATION STATISTICS

Run Time: 1.78 seconds
Elapsed Time: 4.31 seconds
Page Faults: 132
Dynamic Memory: 169 pages

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